NEWSLETTER—Fall/Winter 1983

INTERSPECIES COMMUNICATION

Contact:

At the recent WhalesAlive Conference, sponsored by the International Whaling Commission as well as several leading environmental groups, it was overwhelmingly agreed upon that future relationships with whales and dolphins should focus on *BENIGN RESEARCH.* Of the many types of benign research that were discussed in Boston, the promise of interspecies communication with several different species of cetaceans was accorded much support and encouragement.

We have taken the expressed ideas of that conference to heart; and so have begun to instigate several projects which function as research, and as a means to network all the individuals who are working on communication with animals, (not just dolphins and whales) worldwide. We feel that IC is fast emerging as an active contributor to the worldwide network of scientific researchers, artists, environmentalists, and media people; all united to create a new vision of animals and nature. Below are described some of our recent past, current and near future projects.

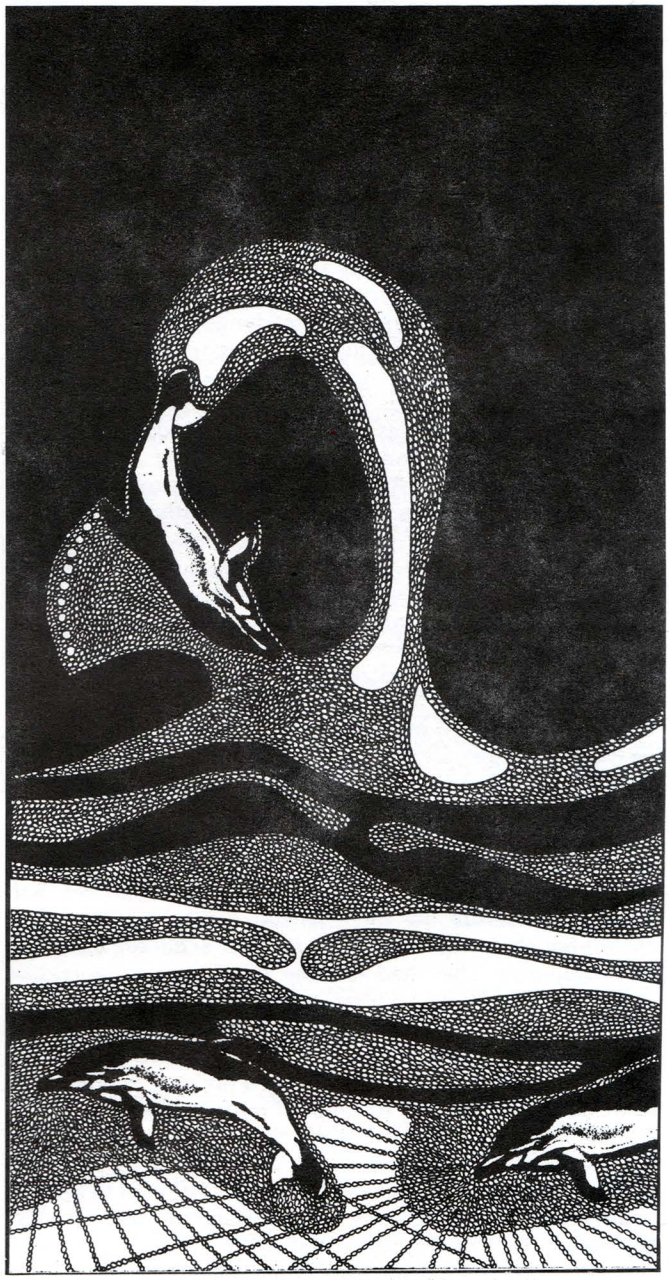
Projects:

1. *The Human/Dolphin Community Project,* sponsored by the Human/Dolphin Foundation of Malibu, with members of Interspecies Communication (IC) as principal investigators, has come to a conclusion after a successful four months of research in Careyes, Mexico. We have learned that it is indeed possible to establish a meeting area at a selected spot on the ocean, and then to develop a daily and intense relationship with the same resident dolphins. In the case of Careyes, the relationship between the humans and the local spotted dolphins (stenella attenuata) was based entirely on live music played on electric guitar and piano and transmitted into the water via an underwater speaker. During the first month of this activity we observed dolphin inititiated play on 6 out of 16 days on the water. During the third month this figure had changed to the very encouraging 16 out of seventeen. Also, during this third month, we began to achieve some remarkable interactions with inwater play between humans and dolphins.

However, spotted dolphins are offshore creatures, rarely venturing close enough to a beach to allow us to fulfill our longtime intent of basing the relationship from a raft nearby to shore. Nor was the Careyes beach itself, entirely conductive to nearshore swimming by children or adults. We have plans to eventually include children in a future project. Also, the spotted dolphins are basically shy beings, not possessed of the bold amiability towards humans which distinguishes their larger brained cousins: the bottlenose, the orca, the pseudorca, the beluga whale. Thus, once the musical method was proven tried and true, it was decided to leave Careyes, with the intent to search out another location. This we are now doing.

2. In early June 1983, members of IC were invited to participate as delegates to the WhalesAlive Conference, sponsored by the International Whaling Commission, at the New England Aquarium in Boston. Jim presented a paper entitled: *Interspecies Communication with Small Cetaceans.*

3. In mid-June, members of IC joined a project at Great Sand Ridge off Grand Bahama Island, to participate in a weeklong enchange with resident spotted dolphins. This expedition involved on-sight sharing of methodology with members of *Project Interlock* from New Zealand; and *Friends of the Sea,* based in Connecticut. IC's participation was made possible through a grant from *Friends of the Sea.*



4. During last August IC sponsored *The Orca Project,* marking our sixth continuous year spent with the wild orcas of British Columbia. All participants went into this trip with the understanding that it was to be a prototype for an ongoing exercise in interspecies *community.* Subsequently, the most important feeling to emerge from the expedition, was a genuine committment by a family of people who are already working to continue the collaboration.

This year, we based our acoustic equipment from a 34 foot boat, allowing us 24 hour access to the underwater environment for a full 12 days. And, as in the past, most of the best human/orca interacations occurred late at night. Moreso, because of the nature of a brand new "Orca Guitar", a finely-tuned sound system, and a first time soundcolor correlation, we were better able to precisely explore the interspecies music making without compromise.

For the first time in my own research, I spent many hours matching and mimicking individual whale calls. The whales, in turn, responded enthusiastically to this mimicry, displaying extremely subtle variations in pitch, and the glissando *speed* between the various pitches. Thus, where in the past, I and other researchers have heard only a single identical call repeated over and over again; this time, by precise matching, I heard a clear and firm difference in every single call. That these subtle differences in call pattern were not mere accident was made plain when the orcas would also, match exactly the call just made, *and then* vary it by a fraction of a pitch. By analogy, it is the same kind of approach used in learning any foreign language. At first everything sounds the same. Over time, and through dedicated rote practice, the individual words and intonations begin to emerge. I believe that the continuation of this same approach next summer, will manifest a major contribution in this field of interspecies communication *and* orca language. I shall need a full-time collaborator working with me to record and analyse the data as it happens.

Another aspect of this years human/orca relationship is best transmitted in terms of a story. On Friday August 26, while listening to the underwater environment, I heard what sounded like the largest congregation of orcas that I have ever chanced upon. The whales were evidently in a large bay located two and a half miles directly across the strait from where we were anchored. The mixture of sounds was unique, nothing at all like the stereotypical pod vocalizations of a group of ten or twenty whales. In fact, it sounded very much as if I was listening to the conversations at a cocktail party. There were up to a hundred individual whales, articulating as many as thirty or more individual conversations at any one time. I began to mimic various simple two-note phrases on the slide guitar; allowing up to thirty seconds between my own calls to listen for an answer. About 25 minutes into this exercise, I heard the first of a clear response. It was not one whale however, but rather three orcas who were answering my rough approximations of their own calls with a concise one-two-three cadence. It took more than another half hour's time before the three whales came anywhere near close enough to the boat to permit an accurate back and forth response. They had left the large orca congregation and could now be heard blowing about a quarter mile from the boat. I played a single glissando phrase, usually from E to C, and the orcas would duplicate it: one-two-three. Over the next half hour I carefully changed my own playing style from outright mimicry, to phrases more closely related to human music making. That is, all the pitches were now based firmly on a pentatonic scale, with end notes accented with a clear vibrato. Yet the whales still continued to approximate my own combinations, in a way superior to any past interactions. (For reference listen to *Playing Music With Animals*). This session was fast emerging as one of the best human/orca improvizations ever. It was at that point that I signaled project members Raymond Maurice, Gigi Coyle, and Christof Enderlein to take out the dinghy and attempt to approach the whales with acoustic flute music. This they did, and within five minutes they were drifting very close to the three orcas. But the whales uncharacteristically retreated before the small boat, and in fact has left the area entirely within ten more minutes. This behavior was a dramatic change from past years when the orcas would often frolic around a small boat as music was transmitted into the water. In fact, just the night before a single orca had breached several times just yards from our boat, called to it from the other side of the straits. Yet all attempts on my own part to reestablish contact with either the three whales or with any of the rest of the larger congregation, failed to generate any response whatsoever.

Three days later, we were visited by a group of scientists who were undertaking their own orca behavioral study from a research base just up the coast from us. They informed us that on Thursday afternoon, salmon fisherman had been seen shooting at some of the orcas. A female had been shot through the lower dorsal fin; a juvenile male, through the head. Both whales were still alive. Moreso, the "cocktail party" that we had heard was, in fact, an aggregation of *all* the local pods inhabiting the entire general area. It was the first time this year that such a large group had been seen together. That not only explains the size of the groups we heard, it also points out an explanation of why the sounds were so unusual. Furthermore, and critically, it gives a solid reason why the three orcas retreated before the small boat. In fact, for the entire rest of our project, whenever the orcas chose to vocalize with our musical calls, they never ventured closer than a quarter of a mile from our boat. The quality of the calls was often very interactive; it was only too far away. And if any of us attempted closer contact by paddling a kayak towards them, inevitably the whales would retreat altogether. Most critically, for our own research, the orcas never ventured close enough to our floating lab to permit us to make balanced, and clear tape recordings; a necessity for later analysis.

This experience offers dramatic proof that tampering with wild whales—whether it be bodily harm or even the capture of 100 whales as now proposed by *Seaworld*—obstructs and even destroys the kind of benign research of which *Interspecies Communication* is an example. How can we establish the crucial trust for interaction, when other humans are blatantly disrupting the foundation of that trust?

5. IC is at this time considering various project possibilities in Hawaii, Baja California, Sri Lanka, and Alaska.

President's Note:

Thank you to those of you who wrote to public officials earlier this year to prevent *Sealand Aquarium* in Victoria from taking killer whales from the local (Washington, British Columbia) pods for display purposes. Between the media and the public, a permit for capture was not reissued. However, *Sealand* did acquire several orcas from Iceland; one of which died soon after it's arrival; the others are maintaining their health.

A new permit request for captures again threatened the Pacific Northwest population of orcas this last summer. The request came from *Seaworld,* a San Diego based aquarium. They stipulated that they needed ten killer whales for display and wished to capture ninety others for research purposes of a short duration in the wild. *Seaworld* asked to perform tooth extractions, liver biopsies and stomach sampling. The *National Oceanic and Atmospheric Administration* disallowed this, but did permit taking blood samples, measuring and tagging. The permit does allow *Seaworld* to take the ten killer whales from Alaskan waters and to do research with no more than thirty whales per year over the next five years. Each year *Seaworld* must obtain authorization from NOAA whereby it's agreement is reevaluated.

Scientists and laymen alike gave testimony at a hearing in Seattle this last fall to determine the pros and cons of this issue. IC is working at this time with a member of the Alaskan legislature to prevent captures taking place in that state. As with any capture operation, we feel that this project is both inhumane and unjustified. How can man attempt to bridge the gap between man and cetacean when others of his species are shooting at or tampering with those that he wishes to elicit trust from? If once again readers of our newsletter would like to express their opinions of this new capture project you are welcome to write or call the following individuals:

1. Robert Brumstead, *National Marine Fisheries Service,* U.S. Department of Commerce, Washington, D.C. 20235
2. Rod Chandler, *U.S. House of Representatives,* 216 Cannon H.O.B., Washington, D.C. 20515 (202)225-7761
3. Don Bonkers, *U.S. House of Representatives,* 403 Cannon H.O.B., Washington, D.C. 20515 (202) 225-3536
4. Mike Lowrey, *U.S. House of Representatives,* 1206 Longworth H.O.B., Washington, D.C. 20515 (202) 225-3106
5. Al Swift, *U.S. House of Representatives,* 1502 Longworth, Washington, D.C. 20515 (202) 225-2605
6. Dan Evans, U.S. Senate, 711 Hart, S.O.B., Washington, D.C. 20515 (202) 224-3441
7. Ted Stevens, *U.S. Senate-Alaska,* Washington, D.C. 20515

Also in Monkey Mia, in Western Australia, where a group of dolphins have come daily for years to swim among and to be fed by visitors (a most unique & special situation) one threat to this sanctuary has been overcome and another one now takes its place. The first threat was an application to do mine shelling in Shark Bay, of which Monkey Mia is a part. This application was turned down due to the public's concern for the dolphin's welfare. And now the Local Government Authority has approved the building of a 100 unit hotel at this site. Again, there is the need to take responsible action to stop this detrimental project. Hundreds of visitors come to see these dolphins every year and the *Dolphin Welfare Foundation* has been set up to provide for their protection. If you feel concerned enough to write to those that will have the say on this decision, please write as soon as possible to:

1. The Under-Secretary for Lands and Survey Department, Cathedral Avenue, Perth, Western Australia 6000
2. The Honorable Premier, Mr. Brian Burke, *Minister for Tourism,* Harvest Terrace, Perth, Western Australia 6000

Saying hello to a dolphin

Wade Doak, director of New Zealand's *Project Interlock,* and author of *Dolphin Dolphin* (Sheridan House), is a student of the body language that occurs when humans and dolphins meet at sea. In his most recent writing, a paper presented at the International Whaling Commission's *WhalesAlive Conference,* Wade catalogues some of the observations made by human swimmers while interlocking with dolphins. Eventually, a sensible and reliable model for human-dolphin interlocks will be established which will allow humans everywhere to meet the dolphins without duplicating the mistakes of earlier encounters. If you have some information on such a human-dolphin encounter, Wade encourages you to jot it down and send it to: *Project Interlock,* Box 20, Whangarei, New Zealand.

1. Do not chase dolphins with motorboats. If you swim with dolphins and they suddenly leave, do not go after them. If you stay put, they may very well return.
2. Do not swim after dolphins in the water. They can swim very fast, and seem to prefer to come towards the human without having to worry about whether or not the human will lunge towards them.
3. They come closer when the swimmer is totally submerged.
4. Creative play, somersaulting, and actually swimming away from the dolphins may extend the duration of interlock. They seem to like mimicking the creative human.
5. Many divers make fruitless efforts to touch a dolphin, yet there is much evidence that dolphins prefer to make this decision themselves.
6. Doak concludes his paper by stating: "Benign methods of field research into cetaceans depend on the emergence of a cultural climate among humans in which trust and mutual acceptance are widespread. For this reason, non-benign treatment of dolphins, such as their hunting and capture for exhibition or tagging, are in total conflict with this ethos, and forestall the growth of scientific knowledge of these creatures."

Films

1. *The Human/Dolphin Community Project* was filmed in February 1983 by Televisa, a Latin-American TV network, and later aired to 130 million Spanish speaking viewers worldwide.

2. Jim was filmed in March 1983, while conducting an experiment in interspecies music-making with wild howler monkeys in the jungles of Panama. This piece will be aired as a segment of the upcoming *Smithsonian World,* to be shown over PBS February 1984.

3. In mid-July Jim was filmed by film maker Ted Crail as part of the ninety minute documentary, *The Ninth Crusade,* about people who are actively trying to change the way humans relate to animals.

We Extend Thanks:

1. To Phil Cacopardo, for building the world's first guitar to be exclusively with whales and dolphins.
2. To John and Toni Lilly for making the *Human/Dolphin Community Project* a reality.
3. To Larry Vertefay of *Friends of the Sea.*
4. To Robbins Barstow for making the *WhalesAlive Conference* the remarkable success it was.
5. To Seymour Duncan for pickup design in a specialized guitar.
6. To Filippo Brignone for giving us Careyes.
7. To Alan Slifka of the *Big Apple Circus.*
8. To Gigi Coyle for her guidance, enthusiasm & support.

Book List

1. Crail, Ted, *Apetalk and Whalespeak,* JP Tarcher, Inc. 9110 Sunset Blvd. , Los Angeles, CA 90069, 1981
   Provides excellent information about animal-human communication including work of Penny Patterson, John Lilly, Jim Nollman, Belle Benchley.
2. Doak, Wade, *Dolphin Dolphin,* Sheridan House, 175 Orawaupum St., White Plains, New York 10606, 1982
   Ideas and anecdotes from all over the world on human-dolphin encounters, emphasizing methods for establishing a relationship with wild dolphins.
3. Dobbs, Horance, *Follow the Wild Dolphin,* St. Martins Press, New York, 1982
   The story of a relationship between a wild dolphin and the author, offering a plea for their preservation.
4. Ellis, Richard, *The Book of Whales,* Alfred A. Knopf, New York, New York, 1980
   An atlas about all known whale species, including natural history. Good illustrations.
5. Ellis, Richard, *Dolphins and Porpoises,* Alfred A. Knopf, New York, New York, 1982
   Text, including natural history, and artwork of many species of dolphins and porpoises.
6. Gawain, Elizabeth, *The Dolphin's Gift,* Whatever Publishing, 158 E. Blithedale, Suite 4, Mill Valley, CA 94941, 1981
   The author's experiences at Monkey Mia, where dolphins have been interacting with humans for several years.
7. Griffin, Ted, *Namu, Quest for the Killer Whale,* Gryphon West, Seattle, Washington, 1983
   An intimate portrait of the relationship between the author and an orca in captivity.
8. Halifax, Joan, *Shamanic Voices,* Dutton, New York, 1979
   A valuable introduction to the religion of primative cultures. The shamans speak for themselves.
9. Khan, Inayet, *Music,* Sufi, India, 1962
   This may be the only book ever written that looks at music as communication from heart to heart, mind to mind—a spiritual discipline. Music as it is rather than as clumps of notes on paper.
10. Kuhn, Thomas, *The Structure of Scientific Revolutions,* U. of Chicago Press, 1970
    The best introduction of how science first resists then grows and changes when it is confronted by revolutionary ideas.
11. Leatherwood, Stephen, and Reeves, Randall R., *The Sierra Club Handbook of Whales and Dolphins,* Sierra Club Books, 530 Bush Street, San Francisco, CA 94108, 1983
    An excellent cetacean guide.
12. Leopold, Aldo, *Sand Country Almanac,* Oxford U. Press, New York, 1949
    A classic. The account of naturalist's observations of one area over a complete yearly cycle.
13. Lilly, John C., *Lilly on Dolphins,* Anchor Press/Doubleday, Garden City, New York, 1975
    John Lilly describes his ground-breaking attempts to communicate with dolphins; as a result of his discoveries scientists have revised their notions of how humans think and communicate.
14. Lovelock, JE, *Gaia,* Oxford Press, 1979
    Demonstrates that the earth is a self-regulating organism. This book is a genuine mindshaker, for those xho value scientific method but question cosmic consciousness.
15. Mooney, Ted, *Easy Travel To Other Places,* Farrar, Straus & Giroux, New York, 1981
    A novel based on communication experiments between a captive dolphin and a woman.
16. Norris, Kenneth S., *The Porpoise Watcher,* W.W. Norton & Co., New York, 1974
    Chronicle of scientific adventure; Dr. Norris' career.
17. Robson, Frank, *Thinking Dolphins, Talking Whales,* A.H. & A.W. Reed, Ltd., 11 Southhampton Row, London WCIB 5HA, 1976
    Frank tells of his unique experiences with cetaceans, including non-verbal mental communication between man and dolphin.
18. Searls, Hank, *Soundings,* Ballantine Books, Random House, New York, 1982
    A compelling story of an aging sperm whale who seeks to understand his mystical relationship with humanity.
19. Sheldrake, Rupert, *A New Science of Life,* Paladin, New York, 1983
    If Sheldrake's hypothesis is correct than we will have to rethink evolution so as to include a bio-radio network called Morphic Resonance.
20. Watson, Lyall, *The Lightning Bird,* Dutton, 1982
    Watson is one of the very best writers of man and nature, and this may be his best book yet. It is the biography of Adrian Boshier, anthropologist and shaman. The background is the South African bush lands and it's natives.

Illustration by Lou Silva

There lies the imprint of a single cloven hoof. A tracker squats easily down beside it on his haunches, examines the depth and shape of the spoor, feels the texture of the soil, and notes the direction and extent to which the surface has been disturbed by the passage of the animal. He concludes that it was made by a kudu antelope, a yound female, injured in her left front leg by an unsuccessful attack by a crocodile, two hours ago as she drank at a nearby pool. This we call science.

The tracker stands over the hoofprint and points at it, palm down with his fingers folded back and thumb spread out at right angles, to hold the spoor in place and keep the antelope from fleeing too far. Then he reaches out to strip a single white thorn from an acacia growing alongside the trail and plunges this down into the imprint to aggravate the animals wound. This we call magic.

—From **The Lightning Bird** by Lyall Watson Pg 22